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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,859	04/25/2005	Il-weon Cho	CU-4077 WWP	1880

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EXAMINER	
KHAN, SUHAIL	
ART UNIT	**PAPER NUMBER**
2686	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/523,859	CHO ET AL.	
	Examiner	Art Unit	
	Suhail Khan	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *5/25/2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 February 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/25/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent App. Pub. No. 2002/0103929 to Molnar in view of U.S. Patent App. Pub. 2004/0203945 to Qu et al.

Referring to **claim 1**, Molnar discloses a method for processing a short message (page 3, paragraph 49, SMS) in a mobile communication network (page 2, paragraph 32, network) including a mobile switching center for switching calls (page 1, paragraph 9, VMSC), a short message service center for providing a short message service (page 1, paragraph 9, SMS-GMSC has SMSC functionality), and an operation control unit for operating and managing the short message service center (page 1, paragraph 8, Service Center), a method for processing an address of a short message service center (page 3, paragraph 49, address part of SMS message supplied to SMS-GMSC), comprising: a load centralization confirmation step where the operation control unit receives short message processing states from each short message service center, confirms load centralization states of each short message service center (page 4, paragraph 57, optimizing routing of messages by SMSC-SMS-GMSC to reduce load; page 3, paragraph 51, device receives message that optimal route was not successful; each route result is interpreted as being a state), and generates an operation message (page 3, paragraph 52, instruction is forwarded based on the detection, instruction is interpreted as being the operation message); a path setup step

where the mobile switching center receives a short message from a mobile station, and sets up a transmission path of the short message according to the operation message (page 3, paragraph 50, route selected based on ROUTE_IND parameter); and an optimal transmission step where the mobile switching center transmits the short message from the mobile station to the corresponding short message service center through the transmission path according to the result the path setup step (page 5, paragraph 29, route via MSC, also, figure 1 MS-VMSC-SMS/GMSC). Molnar does not disclose the above SMS method in a WCDMA network. The examiner maintains that the concept of SMS messaging in a WCDMA network was well known in the art as taught by Qu et al.

In a similar field of endeavor, Qu et al disclose SMS in WCDMA (page 1, paragraph 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Molnar to show a method for processing a short message in a mobile communication network including a mobile switching center for switching calls, a short message service center for providing a short message service, and an operation control unit for operating and managing the short message service center, a method for processing an address of a short message service center in a WCDMA network, comprising: a load centralization confirmation step where the operation control unit receives short message processing states from each short message service center, confirms load centralization states of each short message service center, and generates an operation message; a path setup step where the mobile switching center receives a short message from a mobile station, and sets up a transmission path of the short message according to the operation message; and an optimal transmission step where the mobile switching center transmits the short message from the mobile station to the corresponding short

message service center through the transmission path according to the result the path setup step, as taught by Qu et al, the motivation being applying the messaging method to different networks (Molnar, page 4, paragraph 57).

Referring to **claim 2**, Molnar discloses the method of claim 1, wherein the load centralization confirmation step comprises a step where the operation control unit receives the short message processing states from each short message service center, confirms a minimum load centralization short message service center according to real-time statistical data (page 4, paragraph 57, optimizing routing of messages by SMSC-SMS-GMSC to reduce load; page 3, paragraph 51, device receives message that optimal route was not successful; each route result is interpreted as being a state), and transmits the operation message for requesting path setup variations to the mobile switching center, so that the minimum load centralization short message service center can process newly-transmitted short messages (page 3, paragraph 50, route selected based on ROUTE_IND parameter).

Referring to **claim 3**, Molnar discloses the method of claim 1, wherein, in the path setup step, the mobile switching center sets up the short message service center corresponding to address information included in the operation message from the operation control unit as a minimum load centralization short message service center to set up the transmission path of the short message (page 4, paragraph 57, optimizing routing of messages by SMSC-SMS-GMSC to reduce load), and in the optimal transmission step, the mobile switching center transmits the short message from the mobile station to the minimum load centralization short message service center through the transmission path (page 3, paragraph 50, route selected based on ROUTE_IND parameter).

Referring to **claim 4**, Molnar discloses the method of claim 2, wherein, in the load centralization confirmation step, the operation control unit decides the short message service center processing a relatively small number of short messages as the minimum load centralization short message service center in the real time according to the short message processing states from each short message service center (page 4, paragraph 57, optimizing routing of messages by SMSC-SMS-GMSC to reduce load).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patent is cited to further show the state of the art with respect to similar SMS messaging.

U.S. Pat. No. 6745041 to Allison et al.

U.S. Pat. No. 6891811 to Smith et al.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suhail Khan whose telephone number is (571) 272-7910. The examiner can normally be reached on M-F from 8 am to 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold, can be reached at (571) 272-7905.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sk

CHARLES APPIAH
PRIMARY EXAMINER